AMENDMENTS

In the Claims:

1. (Currently Amended) An image processing method for forming images on an image forming device based on a file stored in an image forming data transmission device using a portable terminal, said image forming data transmission device connected to a first internal network constructed inside a first firewall, said image forming device connected to a second internal network constructed inside a second firewall, and a file server connected to an external network constructed on the outside of said first firewall and said second firewall, comprising:

said portable terminal establishing a connection with said image forming data transmission device via said second internal network, said second firewall, said external network, said first firewall and said first internal network using a protocol [[,]] which allows bi-directional connections between the first and second internal network networks and the external network at said first firewall and said second firewall;

said portable terminal transmitting an image forming request for said file stored in said image forming data transmission device to said image forming data transmission device;

said image forming data transmission device receiving said image forming request transmitted by said portable terminal and preparing an image forming data for said file according to said image forming request;

said image forming data transmission device establishing a connection with said file server via said first internal network, said first firewall, and said external network using a protocol, which allows connections only from the first internal network to the external network at said first firewall;

said image forming data transmission device uploading said prepared image forming data to said file server;

said image forming device establishing a connection with said file server via said second internal network, said second firewall, and said external network using a protocol, which allows connections only from the second internal network to the external network at said second firewall;

said image forming device downloading said image forming data from said file server; and

said image forming device forming said image based on said downloaded image forming data.

2. (Previously Presented) An image processing method according to claim 1 further comprising:

said image forming data transmission device transmitting a storage location data indicating where said uploaded image forming data is stored on said file server to said portable terminal;

said portable terminal receiving said storage location data which said image forming data transmission device transmitted;

said portable terminal displaying said received storage location data; and

said image forming device receiving an entry of said storage location data;

wherein said image forming device downloads said image forming data from the storage location on said file server based on said storage location data.

3. (Previously Presented) An image processing method according to claim 1 further comprising:

said image forming data transmission device transmitting a storage location data indicating where said uploaded image forming data is stored on said file server to said portable terminal;

said portable terminal receiving said storage location data which said image forming data transmission device transmitted;

said portable terminal transferring said received storage location data to said image forming device via said second internal network or a local communication circuit; and

said image forming device receiving said storage location data transferred by said portable terminal;

wherein said image forming device downloads said image forming data from the storage location on said file server based on said storage location data.

4. (Previously Presented) An image processing method according to claim 1 further comprising:

said file server transmitting a storage location data indicating where said image forming data uploaded by said image forming data transmission device is stored on said file server to said portable terminal;

said portable terminal receiving said storage location data which said file server transmitted;

said portable terminal displaying said received storage location data; and

said image forming device receiving an entry of said storage location data;

wherein said image forming device downloads said image forming data from the storage location on said file server based on said storage location data.

5. (Previously Presented) An image processing method according to claim 1 further comprising between:

said file server transmitting a storage location data indicating where said image forming data uploaded by said image forming data transmission device is stored on said file server to said portable terminal;

said portable terminal receiving said storage location data which said file server transmitted;

said portable terminal transferring said received storage location data to said image forming device via said second internal network or a local communication circuit;

said image forming device receiving said storage location data transferred by said portable terminal;

wherein said image forming device downloads said image forming data from the storage

location on said file server based on said storage location data.

6. (Original) An image processing method according to claim 1 wherein said image

forming device is a printer and said image forming data is a printing job.

7. (Currently Amended) An image processing method for forming an image on an image

forming device based on a file stored in an image forming data transmission device using a portable

terminal, said image forming data transmission device connected to a first internal network

constructed inside a first firewall, said image forming device connected to a second internal network

constructed inside a second firewall, and a file server connected to an external network constructed

on the outside of said first firewall and said second firewall, comprising:

said portable terminal establishing a connection with said image forming data transmission

device via a public network, a public network authenticating server connected to said first internal

network, and said first internal network;

said portable terminal transmitting an image forming request for said file stored in said

image forming data transmission device to said image forming data transmission device;

said image forming data transmission device receiving said image forming request

transmitted by said portable terminal and preparing an image forming data for said file according to

said image forming request;

said image forming data transmission device establishing a connection with said file server

via said first internal network, said first firewall, and said external network using a protocol, which

allows connections only from the first internal network to the external network at said first firewall;

said image forming data transmission device uploads said prepared image forming data to

said file server;

said image forming device establishing a connection with said file server via said second internal network, said second firewall, and said external network using a protocol, which allows connections only from the <u>second</u> network to the external network at said second firewall;

said image forming device downloading said image forming data from said file server; and

said image forming device forming said image based on said downloaded image forming data.

8. (Currently Amended) An image processing method according to claim 7 further comprising ~~between~~:

said image forming data transmission device transmitting a storage location data indicating where said uploaded image forming data is stored on said file server to said portable terminal;

said portable terminal receiving said storage location data which said image forming data transmission device transmitted;

said portable terminal displaying said received storage location data; and

said image forming device receiving an entry of said storage location data;

wherein said image forming device downloads said image forming data from the storage location on said file server based on said storage location data.

9. (Currently Amended) An image processing method according to claim 7 further comprising ~~between~~:

said image forming data transmission device transmitting a storage location data indicating where said uploaded image forming data is stored on said file server to said portable terminal;

said portable terminal receiving said storage location data which said image forming data transmission device transmitted;

said portable terminal transferring said received storage location data to said image forming device via said second internal network or a local communication circuit; and

said image forming device receiving said storage location data transferred by said portable terminal;

wherein said image forming device downloads said image forming data from the storage location on said file server based on said storage location data.

10. (Currently Amended) An image processing method according to claim 7 further comprising ~~between~~:

said file server transmitting a storage location data indicating where said image forming data uploaded by said image forming data transmission device is stored on said file server to said portable terminal;

said portable terminal receiving said storage location data which said file server transmitted;

said portable terminal displaying said storage location data; and

said image forming device receiving an entry of said storage location data;

wherein said image forming device downloads said image forming data from the storage location on said file server based on said storage location data.

11. (Currently Amended) An image processing method according to claim 7 further comprising ~~between~~:

said file server transmitting a storage location data indicating where said image forming data uploaded by said image forming data transmission device is stored on said file server to said portable terminal;

said portable terminal receiving said storage location data which said file server transmitted;

said portable terminal transferring said received storage location data to said image forming device via said second internal network or a local communication circuit;

said image forming device receiving said storage location data transferred by said portable terminal;

wherein said image forming device downloads said image forming data from the storage location on said file server based on said storage location data.

12. (Original) An image processing method according to claim 7 wherein said image forming device is a printer and said image forming data is a printing job.

13. (Currently Amended) An image processing system for forming an image on an image forming device based on a file stored in an image forming data transmission device, using a portable terminal, said image forming data transmission device connected to a first internal network constructed inside a first firewall, said image forming device connected to a second internal network constructed inside a second firewall, and a file server connected to an external network constructed on the outside of said first firewall and said second firewall, wherein:

said portable terminal comprises,

a first connection establisher to establish a connection with said image forming data transmission device via said second internal network, said second firewall, said external network, said first firewall and said first internal network using a protocol, which allows bi-directional connections between the first internal network and the external network at said first firewall and said second firewall, and

an image forming request transmitter to transmit an image forming request for said file stored in said image forming data transmission device to said image forming data transmission device;

said image forming data transmission device comprises,

an image forming request receiver to receive said image forming request from said portable terminal,

an image forming data preparer to prepare an image forming data for said file based on said image forming request received by said image forming request receiver,

a second connection establisher to establish a connection with said file server via said first internal network, said first firewall, and said external network using a protocol, which allows connections only from the first internal network to the external network at said first firewall, and

an image forming data uploader to upload said image forming data prepared by said image forming data preparer to said file server; and

said image forming device comprises,

a third connection establisher to establish a connection with said file server via said second internal network, said second firewall, and said external network using a protocol, which allows connections only from the second internal network to the external network at said second firewall,

an image forming data downloader to download said image forming data from said file server, and

an image former to form said image based on said image forming data downloaded by said image forming data downloader.

14. (Original) An image processing system according to claim 13 wherein said image forming device is a printer and said image forming data is a printing job.

15. (Currently Amended) An image processing system for forming an image on an image forming device based on a file stored in an image forming data transmission device, using a portable terminal, said image forming data transmission device connected to a first internal network constructed inside a first firewall, said image forming device connected to a second internal network constructed inside a second firewall, and a file server connected to an external network constructed on the outside of said first firewall and said second firewall, wherein

said portable terminal comprises,

a first connection establisher to establish a connection with said image forming data transmission device via a public network, a public network authenticating server connected to said first internal network, and said first internal network, and

an image forming request transmitter to transmit an image forming request for said file stored in said image forming data transmission device to said image forming data transmission device;

said image forming data transmission device comprises,

an image forming request receiver to receive said image forming request from said portable terminal,

an image forming data preparer to prepare image forming data for said file based on said image forming request received by said image forming request receiving means,

a second connection establisher to establish a connection with said file server via said first internal network, said first firewall, and said external network using a protocol, which allows connections only from the first network to the external network at said first firewall, and

an image forming data uploader to upload said image forming data prepared by said image forming data preparing means to said file server; and

said image forming device comprises,

a third connection establisher to establish a connection with said file server via said second internal network, said second firewall, and said external network using a protocol, which allows connections only from the second internal network to the external network at said second firewall,

an image forming data downloader to download said image forming data from said file server, and

an image former to form said image based on said image forming data downloaded by said image forming data downloader.

16. (Original) An image processing system according to claim 15 wherein said image forming device is a printer and said image forming data is a printing job.

17. (Currently Amended) A portable terminal for forming an image on an image forming device based on a file stored in an image forming data transmission device, using said portable

terminal, said image forming data transmission device connected to a first internal network constructed inside a first firewall, said image forming device connected to a second internal network constructed inside a second firewall, and a file server connected to an external network constructed on the outside of said first firewall and said second firewall, comprising:

a connection establisher to establish a connection with said image forming data transmission device via said second internal network, said second firewall, said external network, said first firewall and said first internal network using a protocol, which allows bi-directional connections between the <u>first</u> network and the external network at said first firewall and said second firewall; and

an image forming request transmitter to transmit an image forming request for said file stored in said image forming data transmission device to said image forming data transmission device.

18. (Previously Presented) A portable terminal according to claim 17 further comprising:

a storage location data receiver to receive a storage location data indicating where an image forming data for said file uploaded to said file server by said image forming data transmission device is located on said file server; and

a storage location data display to display said storage location data received by said storage location data receiver.

19. (Previously Presented) A portable terminal according to claim 17 further comprising:

a storage location data receiver to receive a storage location data indicating where an image forming data for said file uploaded to said file server by said image forming data transmission device is located on said file server; and

a storage location data transferrer to transfer said storage location data received by said storage location data receiver via said second internal network or local communication circuit to said image forming device.

20. (Original) A portable terminal according to claim 17 wherein said image forming device is a printer and said image forming data is a printing job.

21. (Previously Presented) A portable terminal for forming an image on an image forming device based on a file stored in an image forming data transmission device, using said portable terminal, said image forming data transmission device connected to a first internal network constructed inside a first firewall, said image forming device connected to a second internal network constructed inside a second firewall, and a file server connected to an external network constructed on the outside of said first firewall and said second firewall, comprising:

a connection establisher to establish a connection with said image forming data transmission device via a public network, a public network authenticating server connected to said first internal network, and said first internal network; and

an image forming request transmitter to transmit an image forming request for said file stored in said image forming data transmission device to said image forming data transmission device.

22. (Previously Presented) A portable terminal according to claim 21 further comprising:

a storage location data receiver to receive a storage location data indicating where an image forming data for said file uploaded to said file server by said image forming data transmission device is located on said file server; and

a storage location data display to display said storage location data received by said storage location data receiving means.

23. (Previously Presented) A portable terminal according to claim 17 further comprising:

a storage location data receiver to receive a storage location data indicating where an image forming data for said file uploaded to said file server by said image forming data transmission device is located on said file server; and

a storage location data transferrer to transfer said storage location data received by said storage location data receiving means via said second internal network or local communication circuit to said image forming device.

24. (Original) A portable terminal according to claim 17 wherein said image forming device is a printer and said image forming data is a printing job.

25. (Currently Amended) An image forming data transmission device for forming an image on an image forming device based on a file stored in said image forming data transmission device, using a portable terminal, said image forming data transmission device connected to a first internal network constructed inside a first firewall, said image forming device connected to a second internal network constructed inside a second firewall, and a file server connected to an external network constructed on the outside of said first firewall and said second firewall, comprising:

a file storage to store said file;

an image forming request receiver to receive an image forming request for said file stored in said file storage means from said portable terminal;

an image forming data preparer to prepare an image forming data for said file based on said image forming request received by said image forming request receiver;

a connection establisher to establish a connection with said file server via said first internal network, said first firewall, and said external network using a protocol, which is allowed to make connections only from the first internal network to the external network at said first firewall; and

an image forming data uploader to upload said image forming data prepared by said image forming data preparing means to said file server.

26. (Previously Presented) An image forming data transmission device according to claim 25 further comprising a storage location data transmitter to transmit a storage location data indicating where said image forming data uploaded to said file server by said image forming data uploader is located on said file server to said portable terminal.

27. (Original) An image forming data transmitting device according to claim 25 wherein said image forming device is a printer and said image forming data is a printing job.

28. (Currently Amended) An image forming device for forming an image based on a file stored in an image forming data transmission device, using a portable terminal, said image forming data transmission device connected to a first internal network constructed inside a first firewall, said image forming device connected to a second internal network constructed inside a second firewall, and a file server connected to an external network constructed on the outside of said first firewall and said second firewall, comprising:

a connection establisher to establish a connection with said file server via said second internal network, said second firewall, and said external network using a protocol, which allows connections only from the second internal network to the external network at said second firewall;

an image forming data downloader to download from said file server an image forming data for said file uploaded by said image forming data transmission device to said file server; and

an image forming device to form said image based on said image forming data downloaded by said image forming data downloader.

29. (Previously Presented) An image forming device according to claim 28 further comprising a storage location data receiver to receive a storage location data indicating where said image forming data is located on said file server,

wherein said image forming data downloader downloads said image forming data from the storage location on said file server based on said storage location data received by said storage location data receiver.

30. (Previously Presented) An image forming device according to claim 28 further comprising a storage location data receiver to receive a storage location data indicating where said image forming data is located on said file server from said portable terminal via said second internal network or local communication circuit;

wherein said image forming data downloader downloads said image forming data from the storage location on said file server based on said storage location data received by said storage location data receiver.

31. (Original) An image forming device according to claim 28 wherein said image forming device is a printer and said image forming data is a printing job.

32. (Currently Amended) A recording medium that stores a program to control a portable terminal for forming an image on an image forming device based on a file stored in an image forming data transmission device, using said portable terminal, said image forming data transmission device connected to a first internal network constructed inside a first firewall, said image forming device connected to a second internal network constructed inside a second firewall, and a file server connected to an external network constructed on the outside of said first firewall and said second firewall, characterized in causing said portable terminal to execute:

establishing a connection with said image forming data transmission device via said second internal network, said second firewall, said external network, said first firewall and said first internal network using a protocol, which allows bi-directional connections between the first internal network and the external network at said first firewall and said second firewall, and

transmitting an image forming request for said file stored in said image forming data transmission device to said image forming data transmission device.

33. (Canceled).

34. (Previously Presented) A recording medium that stores a program to control a portable terminal for forming an image on an image forming device based on a file stored in an image forming data transmission device, using said portable terminal, said image forming data transmission device connected to a first internal network constructed inside a first firewall, said image forming device connected to a second internal network constructed inside a second firewall,

and a file server connected to an external network constructed on the outside of said first firewall and said second firewall, characterized in causing said portable terminal to execute:

establishing a connection with said image forming data transmission device via a public network, a public network authenticating server connected to said first internal network, and said first internal network, and

transmitting an image forming request for said file stored in said image forming data transmission device to said image forming data transmission device.

35. (Canceled)

36. (Currently Amended) A recording medium that stores a program to control an image forming data transmission device for forming an image on an image forming device based on a file stored in said image forming data transmission device, using a portable terminal, said image forming data transmission device connected to a first internal network constructed inside a first firewall, said image forming device connected to a second internal network constructed inside a second firewall, and a file server connected to an external network constructed on the outside of said first firewall and said second firewall, characterized in causing said image forming data transmission device to execute:

receiving an image forming request for said file from said portable terminal;

preparing an image forming data for said file based on said image forming request;

establishing a connection with said file server via said first internal network, said first firewall, and said external network using a protocol, which allows connections only from the first internal network to the external network at said first firewall; and

uploading said image forming data to said file server.

37. (Canceled)

38. (Currently Amended) A recording medium that stores a program to control an image forming device for forming an image based on a file stored in an image forming data transmission

device, using a portable terminal, said image forming data transmission device connected to a first internal network constructed inside a first firewall, said image forming device connected to a second internal network constructed inside a second firewall, and a file server connected to an external network constructed on the outside of said first firewall and said second firewall, characterized in causing said image forming device to execute:

establishing a connection with said file server via said second internal network, said second firewall and said external network using a protocol, which allows connections only from the second internal network to the external network at said second firewall;

downloading from said file server an image forming data for said file uploaded by said image forming data transmission device to said file server; and

printing based on said image forming data.

39. (Canceled).